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January 29, 2004

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Ms Marlene H Dortch  
Secretary  
Federal Communications Commission  
445 12th St S W  
Washington, DC 20554  
Re Notice of Ex Parte

*Petition of Vonage Holdings Corporation for Declaratory Ruling Concerning an Order  
of the Minnesota Public Utilities Commission, WC Docket No. 03-211,*

*Petition for Declaratory Ruling That AT&T's Phone-To-Phone IP Telephony Services  
Are Exempt From Access Charges, WC Docket No. 02-361,*

*Petition for Declaratory Ruling that pulver.com's Free World Dialup is neither  
Telecommunications nor a Telecommunications Service, WC Docket No. 03-45,  
Level 3 Communications LLC's Petition for Forbearance Under 47 U.S.C. § 160(c) and  
Section 153 of the Commission's Rules from Enforcement of Section 251(g), Rule  
51.701(b)(1), and Rule 69.5(b), WC Docket No. 03-266*

Dear Ms. Dortch,

On January 28, 2004, Mike Holloway, President and CEO and Sam Shiffman,  
Vice President, Engineering of UniPoint Enhanced Services, Inc. d/b/a PointOne, and their  
counsel, Dana Frix and Kemal Hava of Chadbourne & Parke LLP (collectively the  
"Presenters"), met with Lisa Zaina of Commissioner Jonathan S. Adelstein's Office, regarding  
the above-referenced proceedings. The Presenters discussed the regulatory classification of  
VoIP services, and argued that access charges should not be applied to enhanced service  
providers, as explained in the attached materials, disseminated during the meeting.

7.57

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Ms Marlene H Dortch  
Secretary

-2-

January 29, 2004

Pursuant to Section 1.1206(b) of the Commission's rules, eight (8) copies of this letter and presentation are being submitted for filing.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dana Frix".

Dana Frix  
Kemal Hawa

Enclosures

cc Lisa Zama, Esq., FCC/Office of Commissioner Jonathan S. Adelstein (w/encls.)  
Mr Mike Holloway, PointOne (w/o encls.)  
Mr Sam Shiffman, PointOne (w/o encls )

# The Regulatory Classification of VoIP

## PointOne's Proposed Approach

January 2004

Michael Holloway  
President, CEO

Sam Shiffman  
Vice President, Engineering

# Overview

- VoIP Providers Are Enhanced Service Providers or ESPs, and Are Properly Subject to the Regulatory Paradigm Associated with ISP Models
- VoIP Providers Have An Existing Inter-provider Compensation Fee Structure in Place
- They Should Not Be Burdened With Additional Access Fees
- VoIP Providers Contribute Significant Amounts to Social Policy Programs Under Their Existing Regulatory Paradigm as End Users
  - 911, USF, Access by Persons With Disabilities, State Funds, Etc.
  - Any additional requirements should be imposed in phases, and only after due consideration
- Anticompetitive Self-Help Measures by the RBOCs Should Be Prohibited
- This Approach Will Promote the Continued Growth in VoIP and Advanced IP Networks, and Further Technological Innovation

# Overview

- **ESP Access Charge Exemption**
  - **Should Be Extended to Certain VoIP Providers Under PointOne's "Pure ESP Test"**
- **Universal Service Fund (USF)**
  - **ESPs Do Contribute to the USF**
- **Inter-Carrier Compensation (Access Charges)**
  - **Current System Should Be Imposed On Carriers, Not ESPs**
  - **No Retroactive Look Back**
  - **Access Charges Are Not Cost Based and are Thus Inappropriate for Next Gen Networks**
  - **ILEC Should Be Prohibited From Using Access Fees As Self Help Threat/Barrier With CLECs**

# Who is PointOne?

- Most Experienced VoIP Service Provider in Industry – Established in 1998
- Technologically Innovative Services and Profitable Business Solutions for Our Customers via Converged IP Network
- Over \$150 Million In Technology Investments
- Largest VoIP Network in the U.S. Which is Compatible With All Next Gen Technology
- Over ½ Billion Minutes Per Month
- Current Network is our 5<sup>th</sup> Generation
- 12-18 Months Ahead of VoIP World
  - PointOne Offers Features and Scalability That are Unmatched By Any Other Provider

# Who is PointOne?

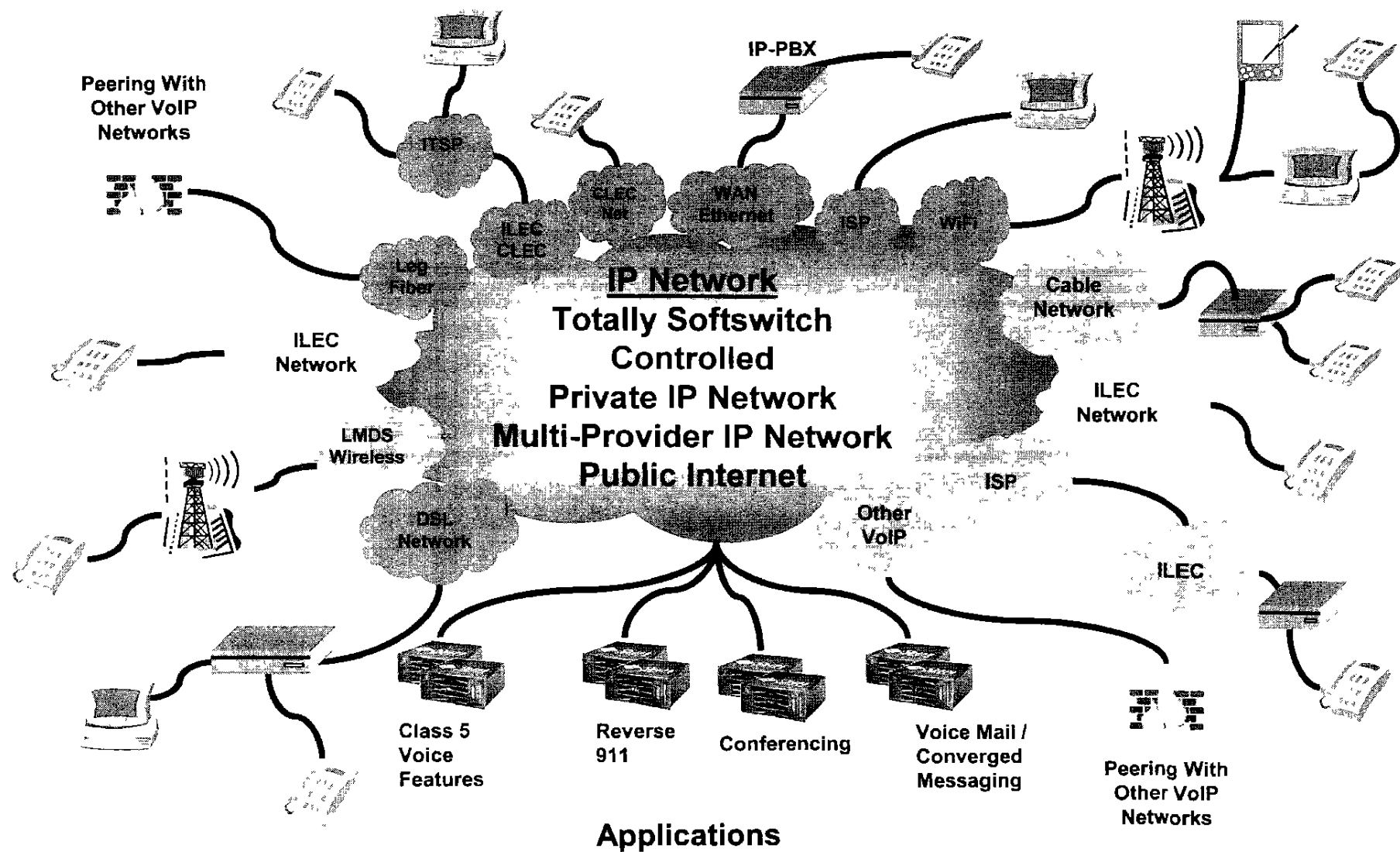
- **All IP - No Legacy TDM Switching Equipment**
- **Network is the Foundation for Enhanced Services**
  - **Enabler of Broadband Voice Applications**
  - **Reverse 911 Notification**
    - i.e. Amber Notification
  - **CALEA Solutions**
- **A Pure ESP**
- **Intermodal Support Utilizing Any-to-Any Interface Throughout the World**
  - **TDM, IP and Wireless Interfaces with Customers**
  - **Bridge Between the PSTN and IP Worlds – Any Port, Any Protocol, Any Application, Anywhere**
- **One of the Most Pervasive (if not the most) IP Communications Networks in the US.**

# התהליך הפוליטי והכלכלי





# The Advance IP Network



# PointOne's Proposal

- **PointOne's VoIP Model is a Pure ESP Model, and Accordingly Should Be Subject to the ESP Exemption from Access Charges**
- **The ESP Exemption Should Only Apply to VoIP Providers That are Pure ESPs, Rather Than Interexchange Carriers as Well**

# The Pure ESP Test

- **To Be Subject to the Enhanced Services Exemption, The VoIP Provider Must Satisfy the Following:**
  - **It must Be a Pure ESP – Not a LEC, CLEC, IXC or Other Common Carrier**
  - **It must Provide an Interstate Information Service**
  - **It must Utilize 100% IP Elements**
  - **It Must Purchase Services and Facilities as an End-User Only (Like ISPs do)**
  - **It Must Pay Taxes and Fees on Each of the Elements it Purchases**
  - **Its Services Must Involve Computer Processing, Interaction With Customer-supplied Information, or Interaction With Stored Information**
  - **All Voice Calls Must Be Converted to IP Regardless of the Equipment Used**
    - **Drawing the line at phone-to-phone IP Telephony, for example, would not be rational, since there is no way to define a phone, and the device used is irrelevant to the manner in which the traffic is transmitted and routed**
  - **Must Have the Ability to Bridge IP Networks to the PSTN and Other Networks (True National Capabilities)**
- **Any Provider (IXC, CLEC, RBOC) That Takes the Steps Necessary to Satisfy These Criteria Would Be Subject to the Exemption**

# The Pure ESP Proposal Will Provide Certainty and Promote Investment and Innovation

- **FCC Deregulatory Action is the Fastest Way to Encourage Build Out of Advanced IP Networks, Products, and Services Necessary to Support VoIP and A Pure ESP Model**
  - **Few features have been added to the PSTN in the last 10 years**
  - **ESPs are different than legacy carriers and must be recognized and treated as such**



# **The Pure ESP Proposal Will Provide Certainty and Promote Investment and Innovation**

- **Regulatory Certainty Will Promote the Continued Growth of VoIP and Advanced IP Networks**
- **Technological Innovation Will Be Furthered**
- **Limited Capital Is Currently Available Due to Lack of an Explicit ESP/VoIP Definition**
  - It is time to encourage investment in VoIP through a clear FCC pronouncement that VoIP is subject to the ESP exemption
- **For VoIP Technologies to be Widely Deployed There Must Be Support for The Bridge Between Existing POTS and TDM Interfaces**
  - **IP is “The Bridge”**
    - A bridge is required to allow for the migration of consumers to advanced IP Networks
    - IP networks must be able to freely communicate with the PSTN
  - **Many Americans do not have access to broadband or cannot afford it**
    - POTS is the only reasonable way they have to access Internet-based services
  - **The Commission Should Support the Vehicle That Bridges the Legacy World To the Next Generation World Through a Regulatory Approach That Supports Investment and Innovation**

# **Alternative Proposals are Not Rationally Related to Any Regulatory Concerns**

- **AT&T Proposes to Exempt Phone-to-Phone IP Telephony**
  - **The physical equipment medium is irrelevant**
    - The term “phone” cannot be defined
    - Any definition could easily be circumvented
  - **Transition from legacy to IP environments would be handicapped by drawing the line at phone-to-phone**
  - **Sensible regulation would require that any line be drawn based on the service provider and type, not on arbitrary criteria such as whether a phone is used**
- **The RBOCs Seek to Impose Access Charges on VoIP in Blanket Fashion**
  - **Access Charges Were Established for Circuit-Switched Telephony**
    - IP traffic is transmitted and routed differently
    - Costs are different as well, e.g. in an IP environment, multiple transmissions can be made simultaneously over a single transmission pathway
  - **Access Charges Continue to Have Implicit Subsidies Built into Them**
    - They are not cost based
    - What, if any, inter-provider compensation is due must be based on the forward looking cost of providing the actual elements
  - **Assessing Access Charges on VoIP Could Kill Numerous Facilities Based CLECs, creating a Fatal Blow to the Handful of Competitive Choices that Consumers Currently Have**

# 911 and CALEA

- **Like the Nascent CMRS Industry, the Technology Should Be Given Time**
  - **Regulatory Certainty is the Starting Point**
    - Under what circumstances must 911 and CALEA requirements be satisfied
      - Which devices, which services, etc.
  - **Ultimately PSAPs Need to Have the Capabilities to Interact With Different Forms of IP Communications**
  - **The Advantages of IP Communications Must Be Taken Into Account as Well**
    - IP communications inherently offer greater access to the disabled
    - IP communications offer national security benefits never dreamed of in a circuit switched environment
      - The ability to track words and phrases at any technically feasible point in an IP network
    - Network redundancy

# Universal Service

- **ESPs Contribute to the USF as End Users**

- Carriers Pass Through USF Fees to PointOne on the Facilities PointOne Purchases From Them
- PointOne Will Contribute Significantly to the USF in the Next 12 Months
- Perhaps This Implicit Contribution by VoIP Providers Should Be Made Explicit
- Pure ESP Contributions Could Be Utilized for the Deployment of VoIP Information Services to Rural America
- 20 – 30% of Local PSTN Access Expenses Are Paid in Taxes and Regulatory Fees by ESPs, including
  - Local County 911 Surcharge, EUCL-End User Common Line Charge, State PUC Fees, Texas TIF, Florida & California Telecom Relay System Fund, NY Target Accessibility Fund, California Universal Lifeline Surcharge, Municipal Right-of-Way Fees, Municipal Franchise Fee, City and State Sales Taxes, FCC Local Number Portability Fee, Interexchange Carrier Charge, Universal Service Fund Fees, FCC Common Line Charge, Federal Excise Tax
- Since ESPs already contribute to USF Under the Current Model, the Commission Has Adequate Time To Evaluate What, if Any, Changes are Required in the Context of an NPRM



# Proposed FCC Action

- **Promptly Issue an Interim Order or NPRM Stating:**
  - **Pure ESP's Are Not Subject to Carrier Access Charges**
    - This holding would apply irrespective of whether AT&T's or Level 3's petitions are granted or denied
  - **Self-Help by the RBOCs is Prohibited**
    - **The RBOCs Must Not Be Allowed To Be the Regulators or Enforcers**
      - RBOCs may not threaten CLECs with imposition of access charges for Pure ESP traffic
      - VoIP providers need not become CLECs before RBOCs must sell them services
      - It should be deemed discriminatory for RBOCs to require CLECs to cease providing services to ESPs
  - **If There is Any Future Change in the Regulatory Status of Access Charges for VoIP, They Shall Not Be Applied Retroactively**

התאחדות המורים  
המחוזית

**PointOne's Approach**

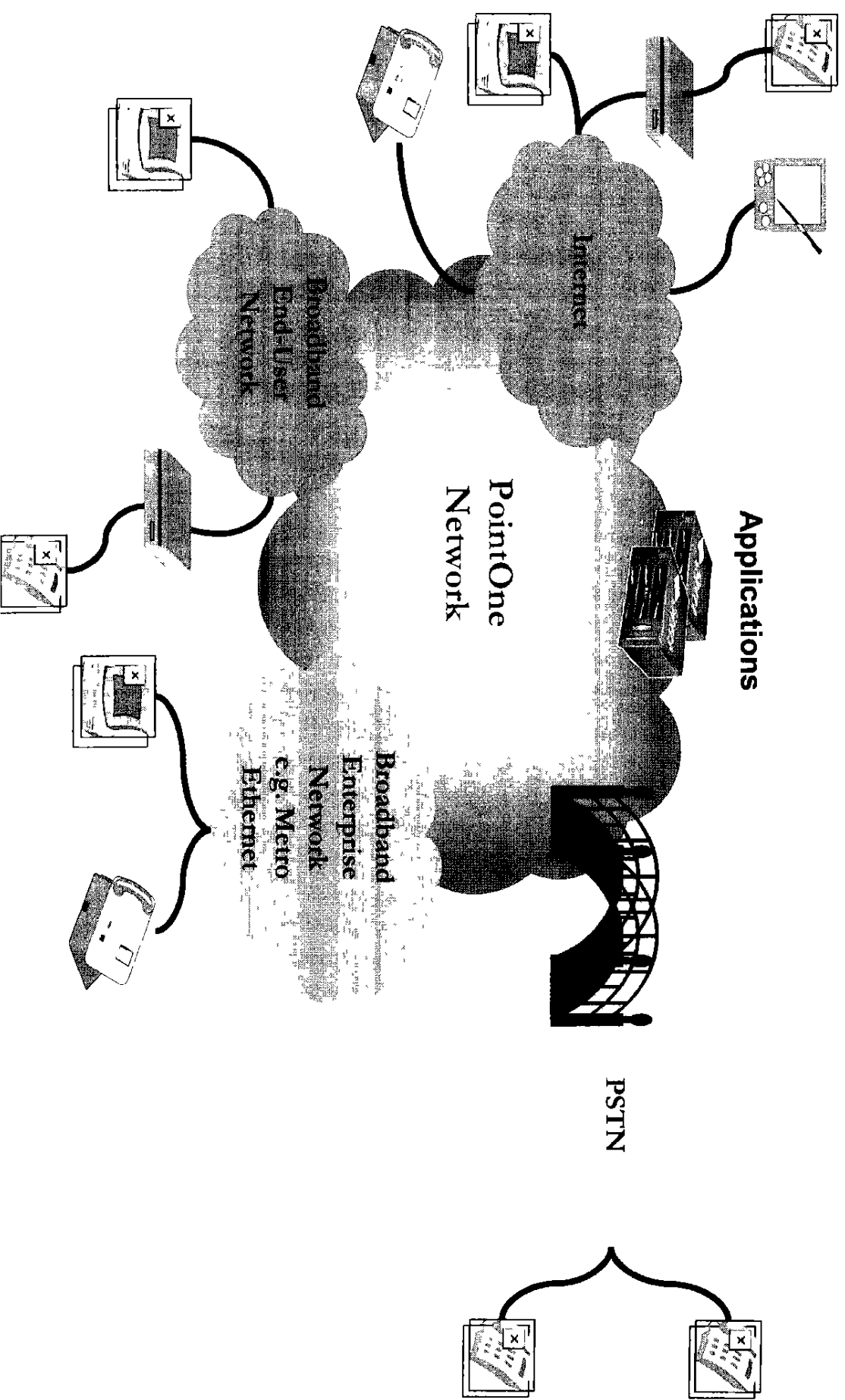
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# The Polished Journey

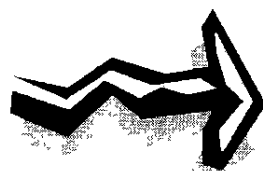
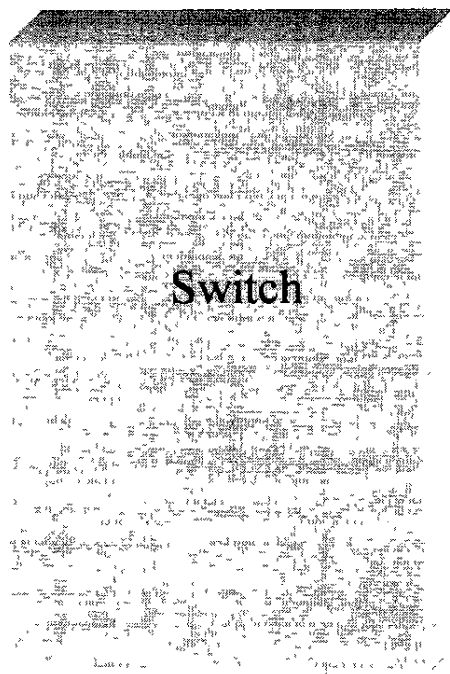


# המדיניות הכלכלית של ישראל

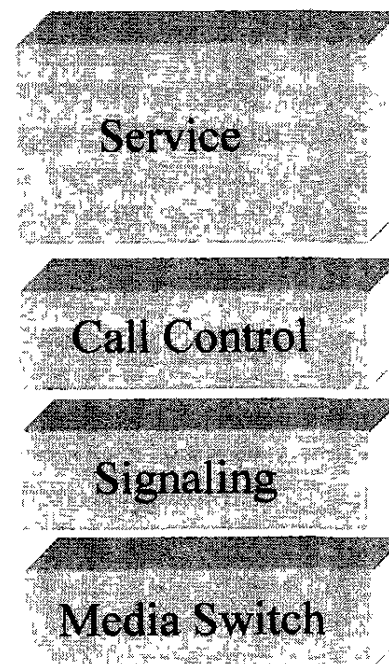


# What is a SoftSwitch – Distributed Architecture

Legacy Switch



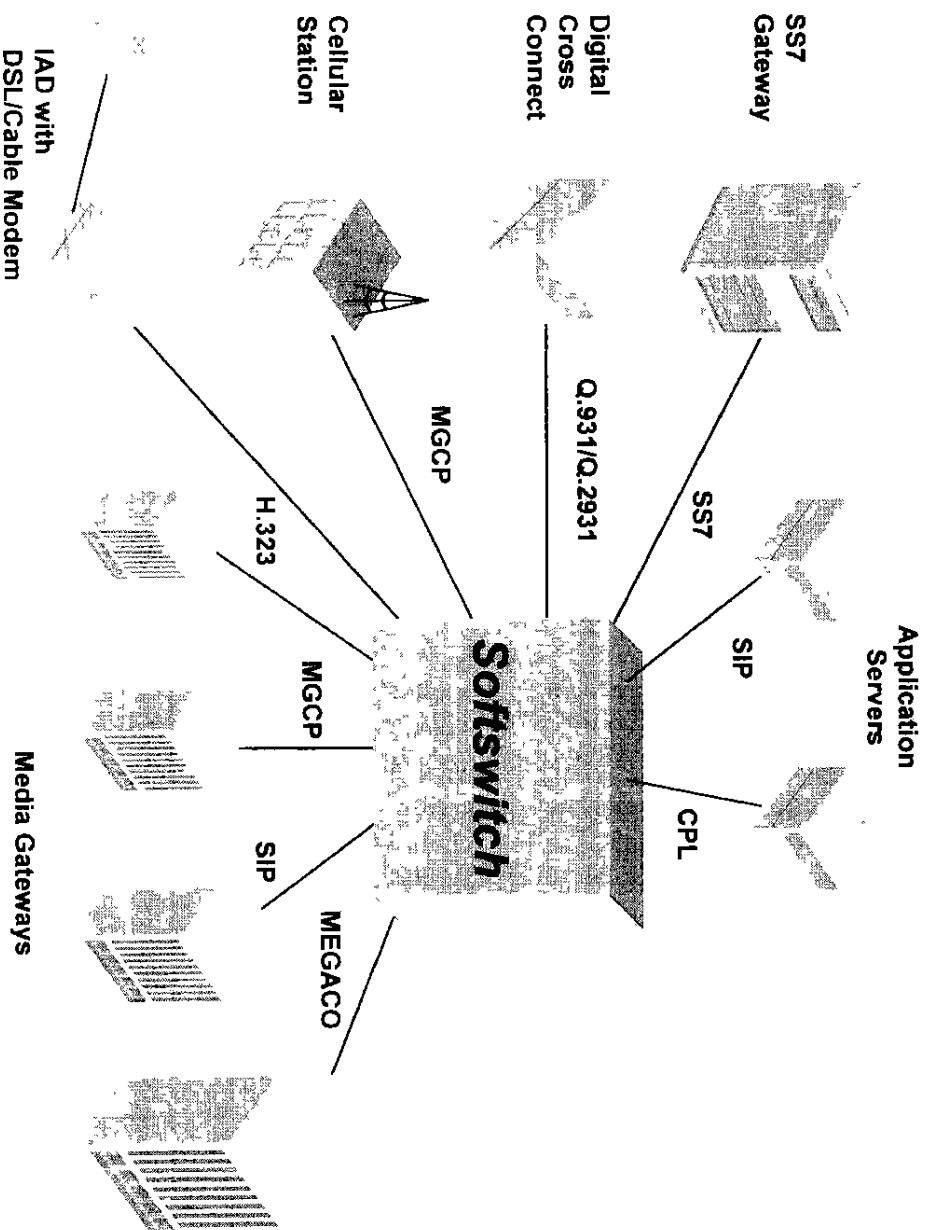
Current Architecture



- Solutions come from a single vendor that supplied everything in one proprietary box: software, hardware and applications
- Customers were locked-in to their vendor—no room for innovation, expensive to implement and maintain

- Solutions can come from multiple vendors, at all levels who supply open standards-based products
- Customers are free to choose best-in-class products to build their network. Open standards enable innovation and reduce costs

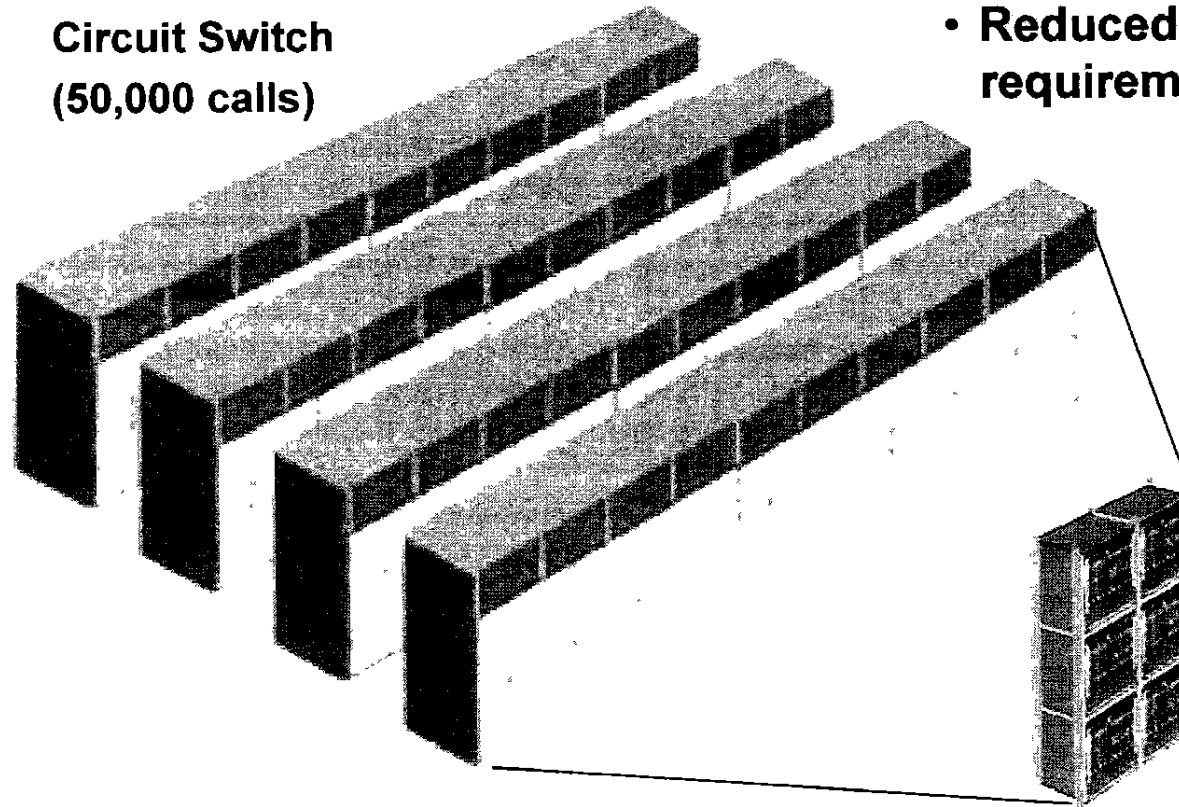
# The Softswitch in VoIP





# Scalability and Density

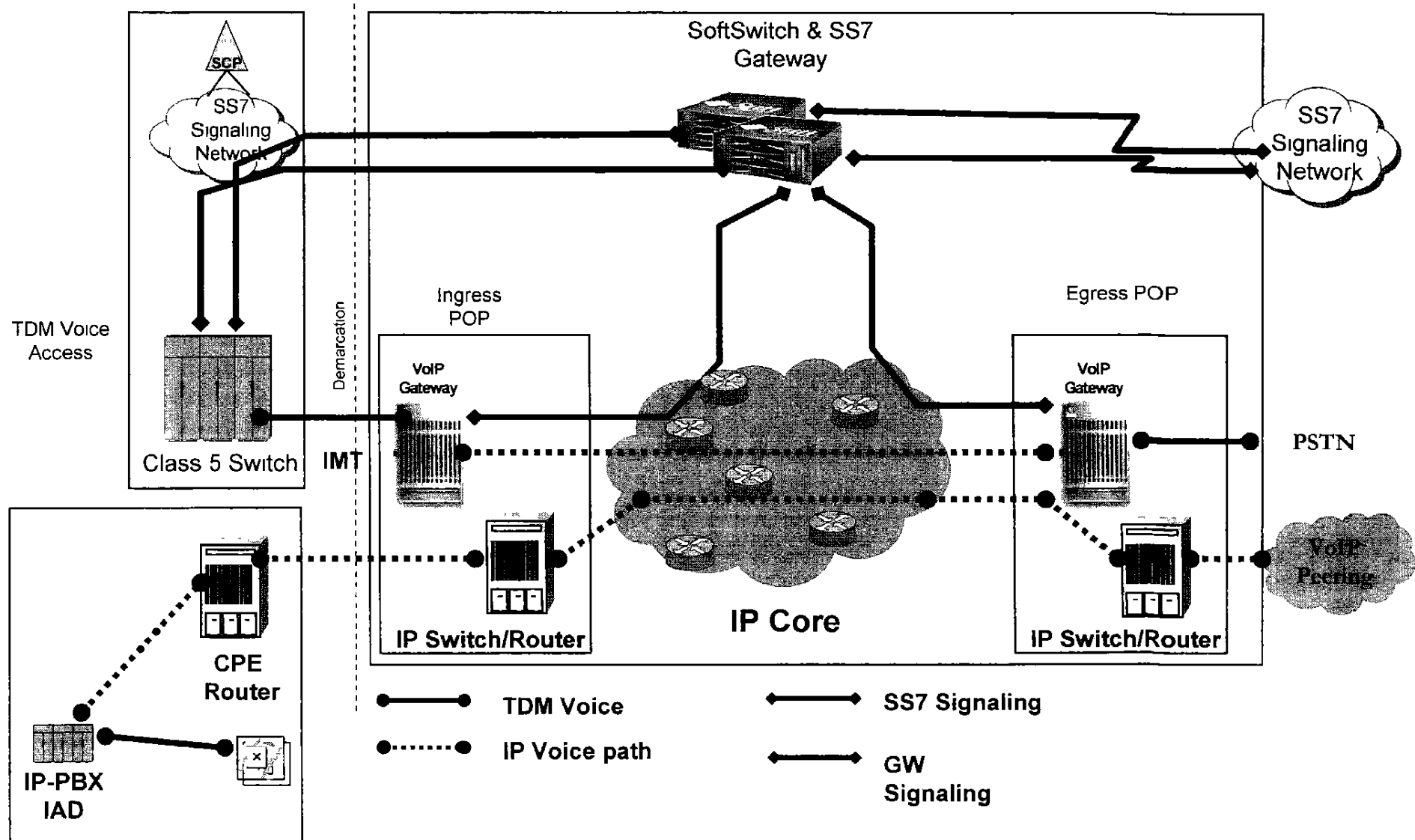
**Circuit Switch  
(50,000 calls)**



- **Lower real estate costs**
- **Easier administration**
- **Reduced power requirements**

**~50,000 calls**

# Call Flow

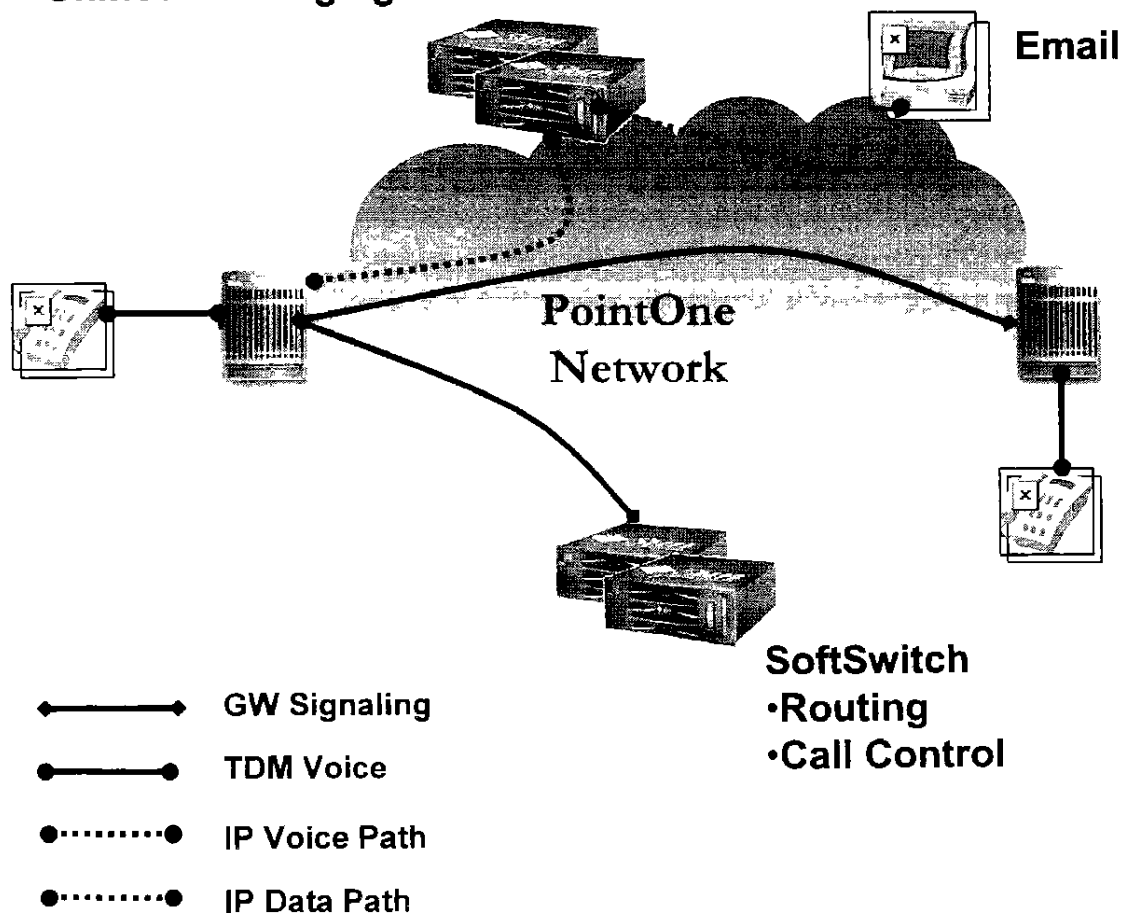


# תכנתים

# Voice Mail Example

## Voice Mail Application

- IVR ("Sorry I am unable to take your call")
- Storage
- Unified Messaging Voice -> Email

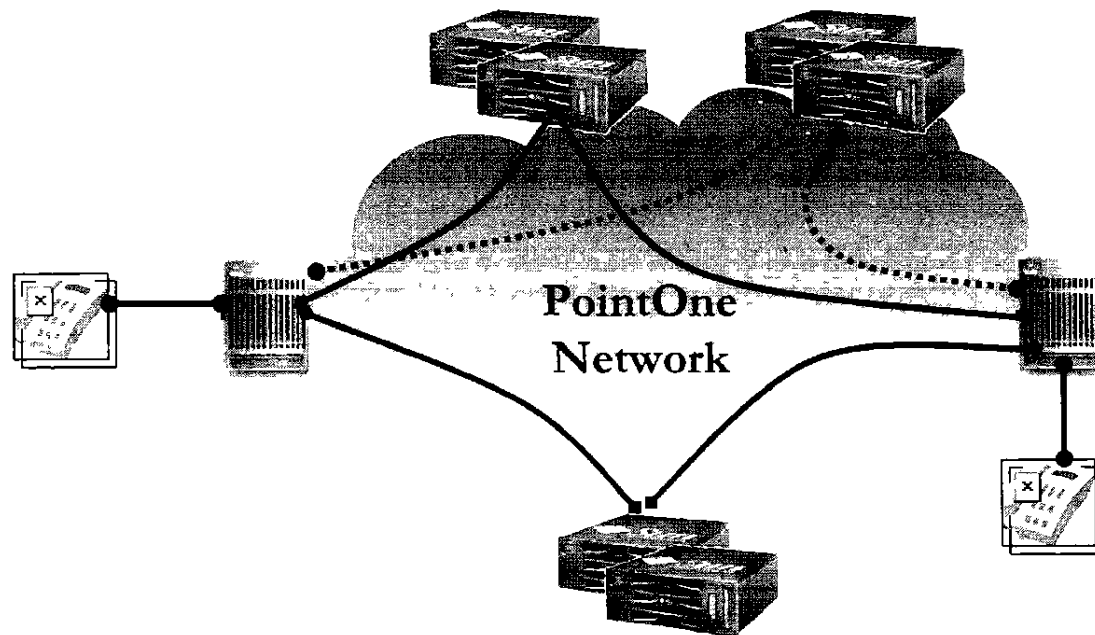


- Call originated
- Ask SoftSwitch where to send the call?
- Ring Far End
- Send to Voice Mail on No Answer
- Send Voice Mail to email

## Conferencing Example

- **Application Logic**

## Conference Bridge



◆————◆ **Signaling (e.g. SIP)**

 **TDM Voice**

●.....● IP Voice Path

●.....● IP Data Path

## SoftSwitch

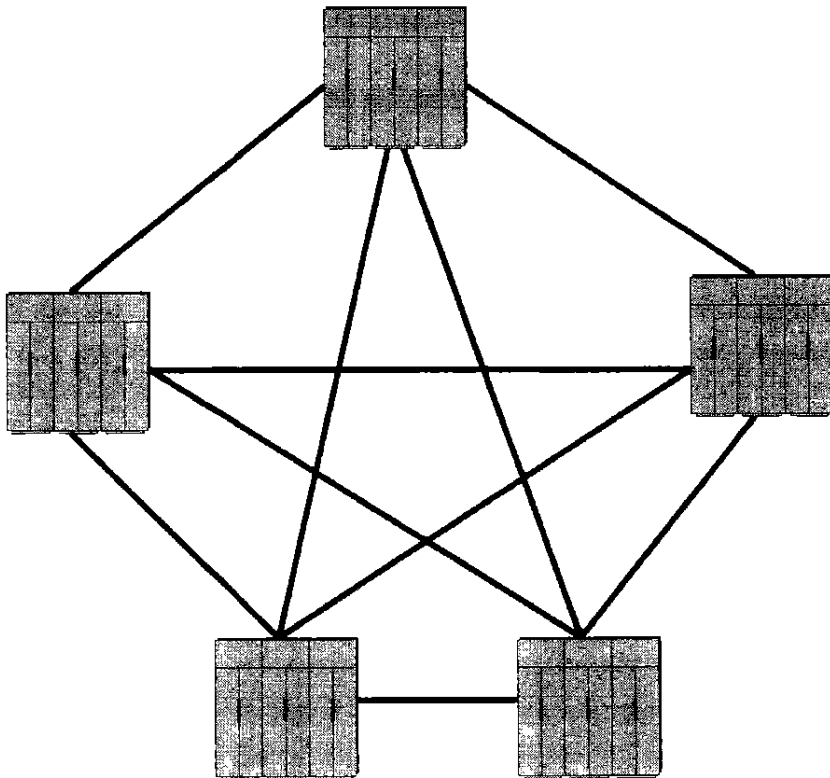
- Routing

- **Call Control**

- **Call originated**
- **Ask SoftSwitch where to send the call?**
- **Collect PIN, Conference ID etc...**
- **Conference Bridge**

# Meshing Issue

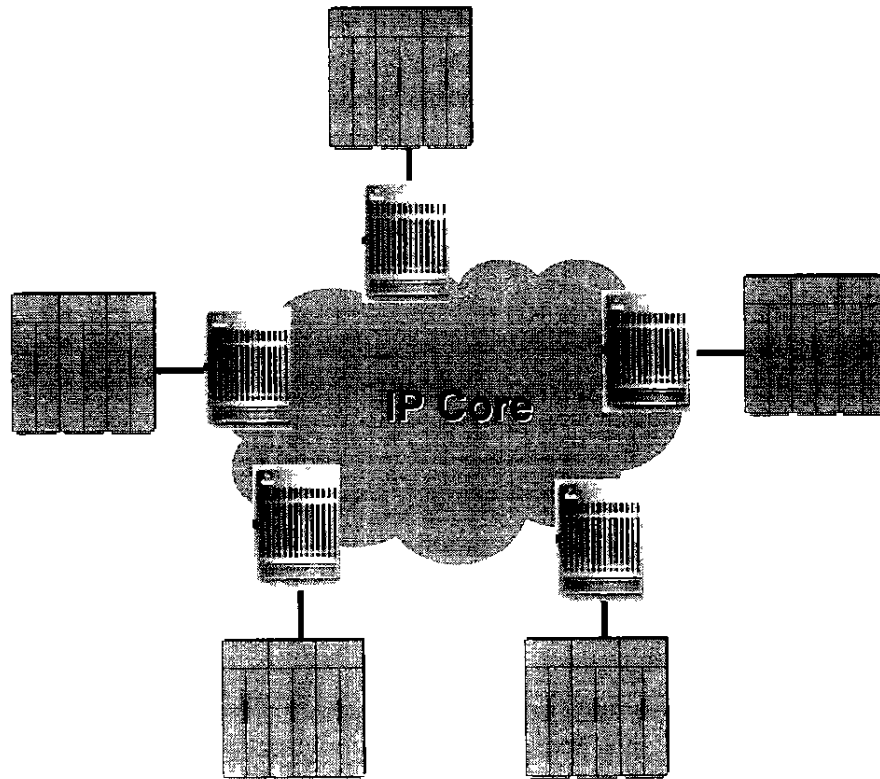
*Int - Inter-machine Trunks*



- **All Switches must be interconnected to every other switch to allow for direct switch to connectivity.**

# Meshing M/VoIP

M/T - Inter-Machine Trunks



- In a VoIP environment there is only a need for one connection to the IP Core.

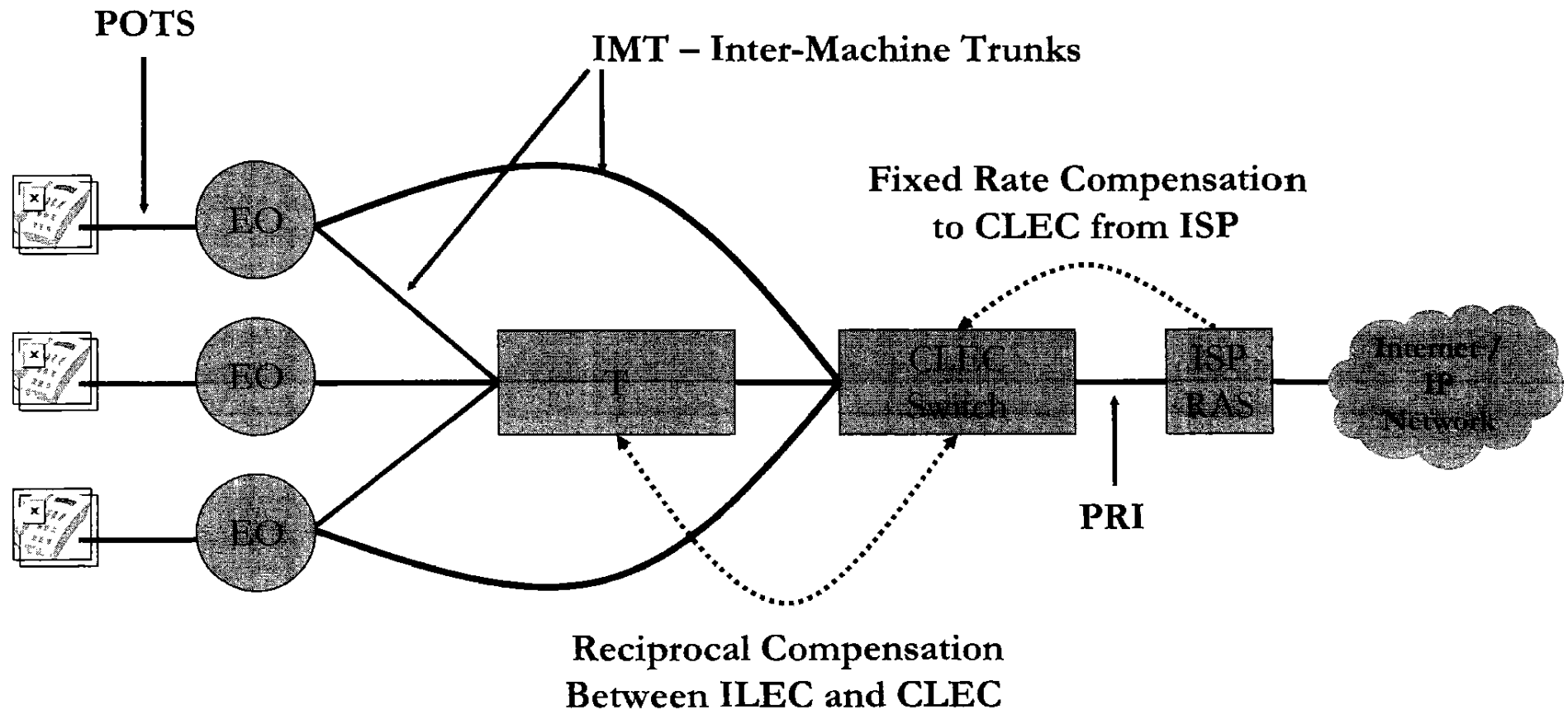




# Modems vs. VoIP Gateways

- **Modem/dial-up based ISPs put the same load on the PSTN as VoIP based ISP/ESP.**
- **Many times VoIP Gateways and Modem pools are the exact same devices (Same box is both a Modem - Remote Access Servers “RAS” and VoIP Gateways) .**

# ISP PSTN Interconnection

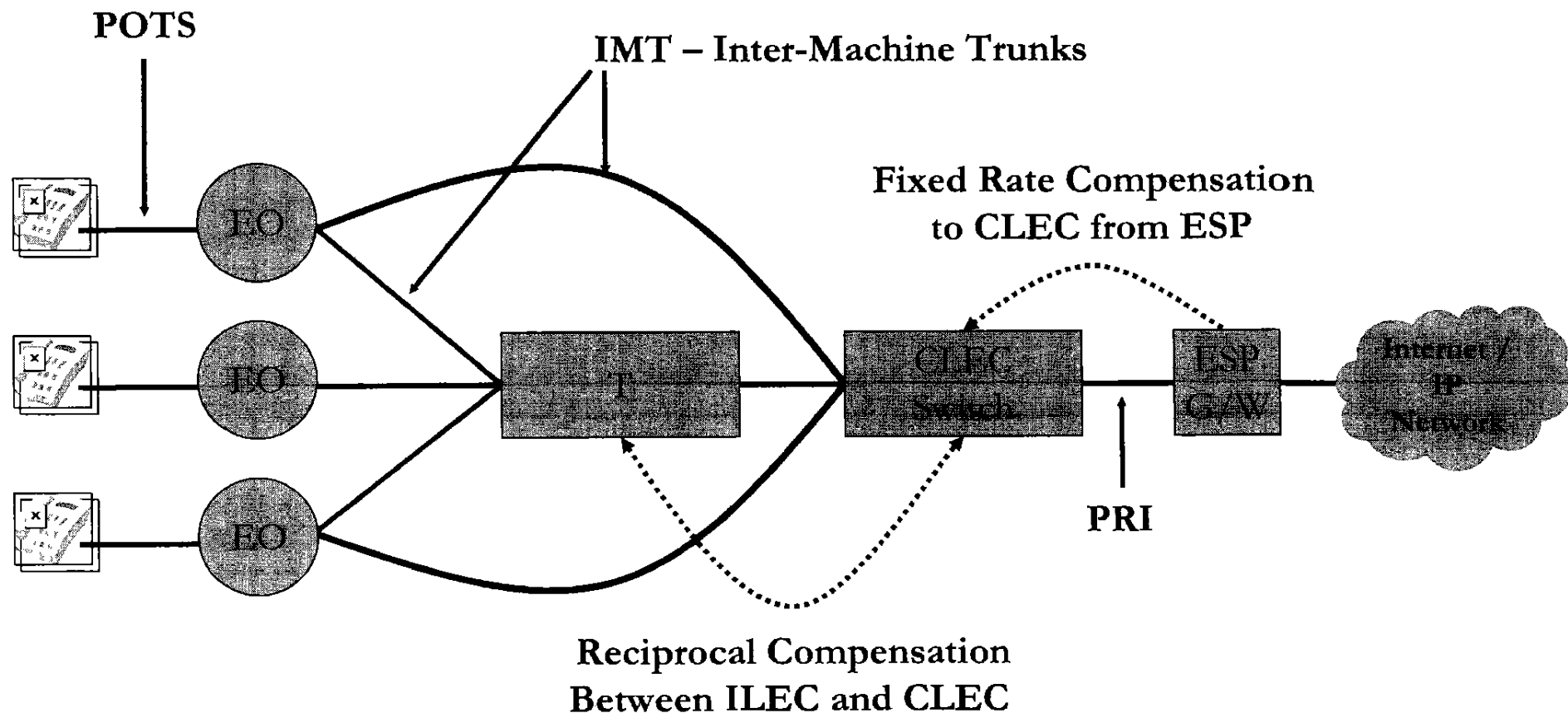


EO – ILEC End Office

T – ILEC Tandem

RAS – Remote Access Server  
(e.g. Modem Pool)

# Pure ESP PSTN Interconnection



EO – ILEC End Office

T – ILEC Tandem

G/W – VoIP Gateway (could be the same box as an ISP RAS)